

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,948	09/29/2000	Mitsuaki Oshima	2000-1327	7017
, 75	590 09/05/2002			
Wenderoth Lind & Ponack LLP			EXAMINER	
20033 K Street NW Suite 800 Washington, DC 20006			LE, AMANDA T	
			ART UNIT	PAPER NUMBER
			2634	2634
			DATE MAILED: 09/05/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

HB

		<u> </u>				
	Application No.	Applicant(s)				
Office Autieus Occurren	09/672,948	OSHIMA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Amanda T Le	2634				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply y within the statutory minimum of thirty (3 vill apply and will expire SIX (6) MONTHS , cause the application to become ABANI	be timely filed  0) days will be considered timely.  6 from the mailing date of this communication.  DONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 28 s	September 2001 .					
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4)⊠ Claim(s) <u>13-18</u> is/are pending in the application	on.					
4a) Of the above claim(s) is/are withdraw	wn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>13-18</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13)⊠ Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 1	19(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority document	s have been received.					
2. Certified copies of the priority document	2. Certified copies of the priority documents have been received in Application No. 08/240,521.					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
<ul> <li>a)          The translation of the foreign language provisional application has been received.     </li> <li>15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1</li> </ol>	5) Notice of Info	nmary (PTO-413) Paper No(s) rmal Patent Application (PTO-152)				

Application/Control Number: 09/672,948 Page 2

Art Unit: 2634

## **Drawings**

1. Although Applicants have requested to transfer the drawings from the parent application, similar requests have been made in all the other co-pending applications. The drawings will be transferred only to the reissue application serial no. 09/244,037. Formal drawings will be required for this Application.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 13, 14, 16, 17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claimed limitations of "an allocator operable to allocate code points along a uniaxial modulation coordinate system, and a filter, having a plurality of coefficients which are a series of impulse responses defined by plotting time base responses to the VSB modulation signal...along the uniaxial modulation coordination system" is not described expressively in the specification. The support for the claimed limitations in the specification (col. 48, lines 31-44, and 31-44, col. 52, lines 56-65, and Figs. 61, 62, 159), as indicated by the Applicants, simply discloses "a modulator" and "a VSB filter".

Art Unit: 2634

## **Double Patenting**

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 13-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,600,672 in view of Bryan et al.

The patented claim discloses all the claimed limitations, except for "the first data stream has data for demodulation including information representing the number of signal points of the second stream in a signal space". Bryan et al discloses a system for transmitting digital television signal wherein one of the data stream indicates the number of signal points of the other data stream (Fig. 2, 5, col. 7, lines 36-42, col. 8, lines 38-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system described in the patented claim using Bryan et al's teachings for the purpose of enabling the receiver the detect the second data stream quickly.

4. Claims 15 and 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2 and 5 of U.S. Patent No. 6,256,357.

Page 3

Application/Control Number: 09/672,948

Art Unit: 2634

Although the conflicting claims are not identical, they are not patentably distinct from each other. Omission of "a Fast Fourier transforming" means or step whose function is not needed for a particular design would have been obvious to one of ordinary skill in the art at the time of the invention.

5. Claims 13-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-18 of copending Application No. 09/668,068, 09/666,012, 09/669,916, 09/672,947 in view of Bryan et al.

The co-pending claim discloses all the claimed limitations, except for "the first data stream has data for demodulation including information representing the number of signal points of the second stream in a signal space". Bryan et al discloses a system for transmitting digital television signal wherein one of the data stream indicates the number of signal points of the other data stream (Fig. 2, 5, col. 7, lines 36-42, col. 8, lines 38-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system described in the copending claim using Bryan et al's teachings for the purpose of enabling the receiver the detect the second data stream quickly. Further, omission of "error correction encoding" means or step whose function is not needed for a particular design would have been obvious to one of ordinary skill in the art at the time of the invention.

This is a <u>provisional</u> obviousness-type double patenting rejection.

6. Claims 15-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-18 of co pending Application No. 09/667,525, 09/672,946. Although the conflicting claims are not identical, they

Page 4

are not patentably distinct from each other. Omission of any means or step whose function is not

needed for a particular design would have been obvious to one of ordinary skill in the art at the

time of the invention.

This is a provisional obviousness-type double patenting rejection because the conflicting

claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Amanda Le whose telephone number is (703)305-4769.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Chin, can be reached at (703)305-4714.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

AMANDA T. LE PRIMARY EXAMINER

Amandal